Alan Wang

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EDUCATION

University of Waterloo – Bachelor of Computer Science   Sept 2020 – Apr 2025

SKILLS

Languages: JavaScript, TypeScript, Python, Java, Kotlin, C++, C, SQL
Technologies: React, React Native, Angular, Node.js, Express.js, Spring Boot
Tools: Git, Docker, AWS, Azure, Kubernetes, Terraform, MongoDB, Redis, PostgreSQL

EXPERIENCE

Capital One | Software Engineering Intern – Toronto, ON   Sept 2024 – Dec 2024

- Spearheading the development and deployment of a new full-stack recruiting platform using **Vue.js**, **Spring Boot** and **AWS (S3, Lambda, DynamoDB)**

Assetflo | Full Stack Engineering Intern – Toronto, ON   May 2024 – Aug 2024

- Developed firmware management flow with **React**, **Node.js**, **MongoDB** and **AWS S3**, saving **6+ hours each deployment**
- Engineered device auto-calibration system using **Node.js** and **Redis caching**, reducing **device setup time by 34%**
- **Improved location accuracy by 92%**, leveraging k-means clustering and kalman filtering algorithms for processing signals
- Integrated Geotab asset tracking API by building a new **Node.js microservice** to serve status info for attached trailers

Manulife | Cloud Engineering Intern – Toronto, ON   Sept 2023 – Dec 2023

- Led development of cloud status page in **Angular** and **TypeScript**, serving live status info for **200+ monthly active users**
- Implemented automation with **Python** and **Github Actions** to fulfill **40+ dev requests per week**, saving **8+ hours**
- Built CLI tools and automation jobs in **Python**, improving cloud tool accessibility and **growing overall use by 12%**
- Streamlined deployment for internal **Azure** tools by writing **Terraform** files and **Github Actions** for new **CI/CD** pipelines

CIBC | Backend Developer Intern – Toronto, ON   Jan 2023 – Apr 2023

- Implemented cards API layer and business logic changes to bring Smart Planner to **300K+ new users** using **Java** and **Spring**
- **Reduced build times by 17%** for account info microservice by optimizing integration tests and enabling parallel execution
- Debugged and fixed **25+ production issues**, analyzing logs in **Splunk** and managing redeployments in **Openshift**

PointClickCare | Software Engineering Intern – Waterloo, ON   May 2022 – Aug 2022

- Led development of new REST endpoint to autofill PDF medical forms from XML data, using **Kotlin** and **Spring Boot**
- Created backend service to use **Azure file storage** to save/retrieve PDF templates for new medical form flow
- **Decreased dev environment startup by 25%** by optimizing initial **SQL stored procedures and queries**

PBSC Urban Solutions | Software Developer Intern – Montreal, QC   May 2021 – Aug 2021

- Built **bluetooth feature** in **React Native** for locking e-bikes in geofenced areas, garnering **4000+ users in first month**
- Developed mobile UI components and views for new payment provider, using **TypeScript**, **React Native**, and **Redux**
- Spearheaded new automated end-to-end testing system using **Mocha**, **Appium** and **WebdriverIO**, saving **10+ hours per regression test cycle**

PROJECTS

Aitomind 🔗 | React, Node.js, Express.js, Azure AI, MongoDB

- Developed web app to generate mindmaps from lecture videos, using **React, Node.js, Express.js** and **MongoDB**
- Leveraged **Azure AI services REST APIs**, and **deployed ML model on Azure**, to transcribe speech and extract connected keywords